

What is claimed is:

1           1. A method for adapting a standard code base, the method comprising:  
2                 canonically parsing a modified version of a first release of a standard code  
3                 base to generate a canonically-parsed representation of the modified version;  
4                 generating difference data representative of changes made to the first  
5                 release of the standard code base using the canonically-parsed of the modified  
6                 version; and  
7                 using the difference data in applying the changes made to the first release  
8                 of the standard code base to a second release of the standard code base.

1           2. The method of claim 1, further comprising canonically parsing an unmodified  
2                 version of the first release of the standard code base to generate a canonically-parsed of  
3                 the unmodified version, wherein generating the difference data includes comparing the  
4                 canonically-parsed representations of the unmodified and modified versions of the first  
5                 release of the standard code base.

1           3. The method of claim 1, further comprising canonically parsing an intermediate  
2                 version of the first release of the standard code base to generate a canonically-parsed  
3                 representation of the intermediate version, wherein generating the difference data  
4                 includes comparing the canonically-parsed representations of the intermediate and  
5                 modified versions of the first release of the standard code base.

1           4. The method of claim 3, wherein the intermediate version of the first release of  
2                 the standard code base is generated using automated source transformation, and wherein  
3                 the modified version of the first release of the standard code base is generated by applying  
4                 manual changes to the intermediate version of the first release of the standard code base.

1           5. The method of claim 1, wherein generating the difference data includes  
2 identifying a plurality of changed semantic components in the modified version of the  
3 first release of the standard code base.

1           6. The method of claim 5, wherein identifying the plurality of changed semantic  
2 components includes identifying a change made to a selected semantic component,  
3 wherein the change is selected from the group consisting of deletion, modification,  
4 addition and replacement.

1           7. The method of claim 6, wherein generating the difference data includes  
2 generating at least one XML file, the XML file including a tag for a changed semantic  
3 component, the tag identifying the changed semantic component and including an  
4 attribute representing the change made to the changed semantic component.

1           8. The method of claim 5, wherein using the difference data in applying the  
2 changes made to the first release of the standard code base to the second release of the  
3 standard code base includes notifying a user of a change in a changed semantic  
4 component.

1           9. The method of claim 5, wherein using the difference data in applying the  
2 changes made to the first release of the standard code base to the second release of the  
3 standard code base includes automatically applying a change in a changed semantic  
4 component to the second release of the standard code base.

1           10. The method of claim 1, further comprising using the difference data in  
2 applying the changes made to the first release of the standard code base to a third release  
3 of the standard code base.

1           11. An apparatus, comprising:

2                   a memory;

3                   at least one processor; and

4                   program code resident in the memory and configured to execute on the at  
5           least one processor to adapt a standard code base, the program code configured to  
6           canonically parse a modified version of a first release of a standard code base to  
7           generate a canonically-parsed representation of the modified version; generate  
8           difference data representative of changes made to the first release of the standard  
9           code base using the canonically-parsed of the modified version; and use the  
10          difference data in applying the changes made to the first release of the standard  
11          code base to a second release of the standard code base.

1           12. The apparatus of claim 11, wherein the program code is further configured to

2           canonically parse an unmodified version of the first release of the standard code base to

3           generate a canonically-parsed of the unmodified version, and wherein the program code is

4           configured to generate the difference data by comparing the canonically-parsed

5           representations of the unmodified and modified versions of the first release of the

6           standard code base.

1           13. The apparatus of claim 11, wherein the program code is further configured to

2           canonically parse an intermediate version of the first release of the standard code base to

3           generate a canonically-parsed representation of the intermediate version, and wherein the

4           program code is configured to generate the difference data by comparing the canonically-

5           parsed representations of the intermediate and modified versions of the first release of the

6           standard code base.

1           14. The apparatus of claim 13, wherein the intermediate version of the first

2           release of the standard code base is generated using automated source transformation, and

3           wherein the modified version of the first release of the standard code base is generated by

4 applying manual changes to the intermediate version of the first release of the standard  
5 code base.

1 15. The apparatus of claim 11, wherein the program code is configured to  
2 generate the difference data by identifying a plurality of changed semantic components in  
3 the modified version of the first release of the standard code base.

1 16. The apparatus of claim 15, wherein the program code is configured to  
2 identify the plurality of changed semantic components by identifying a change made to a  
3 selected semantic component, wherein the change is selected from the group consisting of  
4 deletion, modification, addition and replacement.

1 17. The apparatus of claim 16, wherein the program code is configured to  
2 generate the difference data by generating at least one XML file, the XML file including a  
3 tag for a changed semantic component, the tag identifying the changed semantic  
4 component and including an attribute representing the change made to the changed  
5 semantic component.

1 18. The apparatus of claim 15, wherein the program code is configured to use the  
2 difference data in applying the changes made to the first release of the standard code base  
3 to the second release of the standard code base by notifying a user of a change in a  
4 changed semantic component.

1 19. The apparatus of claim 15, wherein the program code is configured to use the  
2 difference data in applying the changes made to the first release of the standard code base  
3 to the second release of the standard code base by automatically applying a change in a  
4 changed semantic component to the second release of the standard code base.

- 1                   20. The apparatus of claim 11, wherein the program code is further configured to
- 2                   use the difference data in applying the changes made to the first release of the standard
- 3                   code base to a third release of the standard code base.

1           21. A program product, comprising:

2                   program code configured to adapt a standard code base by canonically  
3           parsing a modified version of a first release of a standard code base to generate a  
4           canonically-parsed representation of the modified version; generating difference  
5           data representative of changes made to the first release of the standard code base  
6           using the canonically-parsed of the modified version; and using the difference  
7           data in applying the changes made to the first release of the standard code base to  
8           a second release of the standard code base; and  
9                   a signal bearing medium bearing the program code.

1           22. The program product of claim 21, wherein the signal bearing medium  
2           includes at least one of a transmission medium and a recordable medium.